

Devil's Lake Outlet Discharge
Summary of the Ambient Water Quality Sampling Program

Devil's Lake

- 7 locations
- Vertical profile measurements 4 times per year for temperature, dissolved oxygen, and pH
- Discrete samples 4 times per year at multiple depths for suite of additional parameters including sulfate
- 1 of the sampling locations is several hundred yards offshore near the intake location for the outlet

Sheyenne River

- Discharge monitoring (outlet)
 - Continuous conductivity measurements
 - Continuous flow
 - Sulfate measured 5 times per week
 - pH measured once per week
 - TSS measured once per week
 - Whole effluent toxicity testing on the first discharge each year and then at least once every 90 days in which there is a discharge
- Ambient Sheyenne River monitoring upstream of outlet discharge at Flora and downstream at Bremen, Cooperstown, Valley City and Horace
 - Continuous conductivity measurements
 - Continuous temperature
 - Continuous flow readings at Cooperstown, Valley City and Horace
 - TDS and major ions once per week (includes sulfate, alkalinity, TDS, hardness and turbidity)
 - Ammonia, nitrate/nitrite, TKN, Total and dissolved phosphorus and TSS measured twice per month
 - Trace metals measured once per month (includes aluminum, antimony, arsenic, barium, beryllium, boron, cadmium, chromium, copper, lead, nickel, selenium, silver, thallium, zinc)

Red River

- Multiple stations including upstream and downstream of Sheyenne confluence at Harwood (upstream), Halstad (downstream) and Pembina (downstream)
- Continuous conductivity measurements at each location
- Continuous stream flow
- TDS and major ions once per week